

重庆楼梯草属一新组和三新种

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摘 要 描述了自重庆市江津区四面山发现的荨麻科楼梯草属的一新组和三新种 (1)雌伞楼梯草组 Sect. *Gynosciadion*具一新种 雌伞楼梯草 *Elatostema femineocymosum* 其特征为雌花序为 3 ~ 4 回分枝的聚伞花序 无花序托和总苞 根据这些特征可与楼梯草属的其他组相区别 (2)圆微叶楼梯草 *E. gyronanophyllum* ,与对叶楼梯草 *E. sinense* H. Schröter 近缘 区别特征为此新种的叶较小 具较少二级脉 退化叶圆形或近圆形 雌总苞具 12 枚三角形苞片 雌花具 2 花被片 柱头扁球形 (3)正宇楼梯草 *E. zhengyuanum* ,与四面山楼梯草 *E. simianshanicum* W. T. Wang 近缘 区别特征在于新种的茎无毛 有时为营养茎 其叶片、钟乳体和托叶均较小 雌总苞的苞片呈倒披针状长圆形 在背面无鸡冠状突起。

关键词 荨麻科 楼梯草属 新组 新种 重庆

中图分类号 Q949. 737. 5 文献标志码 A doi :10. 7525/j. issn. 1673 - 5102. 2018. 06. 002

One New Section and Three new species of *Elatostema*
(*Urticaceae*) from Chongqing

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Abstract One section and three species of the genus *Elatostema*(*Urticaceae*) are described as new from the Simian mountain , Jiangjin district , Chongqing city : (1)Sect. *Gynosciadion* with one species , *Elatostema femineocymosum* , is chracterized by its numerous pistillate flowers in a 3 - 4 times branched cyme , lacking a receptacle with an involucre , and by these charactes can be distinguished from all other sctions of the genus *Elatostema* ; (2)*E. gyronanophyllum* is closely related to *E. sinense* H. Schröter , differing from the latter in its smaller leaves with fewer secondary nerves , orbicular or suborbicular reduced leaves , pistillate involucre with 12 triangular bracts , pistillate flower with 2 tepals , and the depressed-globose stigma ; (3)*E. zhengyuanum* is closely related to *E. simianshanicum* W. T. Wang , differing from the latter in its glabrous , sometimes vegetative stems , larger leaf blades , cystoliths and stipules , and oblanceolate-oblong bracts of staminate involucre not carinate abaxially.

Key words *Urticaceae* ;*Elatostema* , new section , new species , Chongqing

楼梯草属 *Elatostema* J. R. & G. Forster

雌伞楼梯草组 Sect. *Gynosciadion* W. T. Wang ,
sect. nov.

Flores pistillati tepalis carentes , numerosi et
densissimi in cymam ter vel quarter ramosam , recep-

taculo involucroque carentem dispositi. Cum his
characteribus sectio nova haec a generis *Elatostematis*
sectionibus ceteris omnibus praeclare distinguitur. In
sectionibus ceteris. Sect. *Pellionioide* W. T. Wang ,
Sect. *Weddellia*(H. Schröter) W. T. Wang , Sect.
Elatostemate et Sect. *Androsyche* Wedd. , flores pistil-

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收稿日期 2018 - 01 - 20

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Received date 2018 - 01 - 20

lati plerumque numerosi in capitulum cum receptaculo involuacroque et ramis carens dispositi.

Typus : *E. femineocymosum* W. T. Wang

Species unica , in Mt. Simianshan , Chongqing Shi endemica.

Etymology : gyne + sciadion : Greek for female and umbel , indicating the pistillate cymose inflorescences of *E. femineocymosum* W. T. Wang.

雌花无花被片 ,多数极为密集的花组成 3 或 4 回分枝的聚伞花序 ,此花序不具花序托和总苞。根据这些特征可将本新组与楼梯草属的所有其他组区别开 ;在其他组 ,疏伞楼梯草组 Sect. *Pellionoides* W. T. Wang (雄花序为聚伞花序) ,小叶楼梯草组 Sect. *Weddellia* (H. Schröter) W. T. Wang ,骤尖楼梯草组 Sect. *Elatostema* 和梨序楼梯草组 Sect. *Androsyce* Wedd. ,其等的雌花组成具花序托和总苞 ,不具分枝的头状花序^[1~3]。

1 种 特产重庆市四面山。

雌伞楼梯草 图 1

Elatostema femineocymosum W. T. Wang , sp. nov. Fig. 1.

Perennial herb. Stem ca. 38 cm tall , above base ca. 2 mm across , glabrous , below the middle with 2 branches 8 – 13 cm long. Leaves all cauline , alternate , shortly petiolate or sessile , glabrous ; blades thinly papery , lanceolate , oblong or oblanceolate , rarely ovate , (1.5 – 4.5 – 11 cm × (0.5 –) 1.5 – 3.2 cm , at apex long acuminate , at base cuneate at leaf narrow side and auriculate at broad side , at margin densely denticulate , penninerved , secondary nerves at each side 4 – 6 , flat , cystoliths dense , bacilliform , 0.2 – 0.3 mm long ; petioles 0 – 1.2 mm long ; stipules white , subulate or narrowly triangular , 2.2 – 3 mm long. Pistillate cymes or infructescences in pair axillary , 5 – 10 mm broad , very shortly pedunculate , 3 – 4 times branched ; branches not winged but often with white wings , the ultimate branches with very dense and numerous flowers or very dense and numerous achenes , and few small subulate bracts and hairs 0.7 mm long ; pedicels very short and robust , ca. 0.1 mm long. Pistillate flower : Tepals absent ; ovary white , oblong , ca. 0.4 mm long , glabrous ; stigma with several white , thick and coarctate hairs 0.3 mm long. Achene white , ovoid ,

ca. 0.5 mm × 0.35 – 0.4 mm , longitudinally and thinly 6-ribbed , glabrous. Staminate inflorescences and staminate flowers unknown.

重庆市 (Chongqing Shi) :江津区 ,四面山 ,水口寺沟 (jiangjin Qu ,Simian Shan ,Shuikousi Valley) ,alt. 757 m ,阔叶林 ,溪边 ,花序黄褐色 (by stream in broad-leaved forest , inflorescences tawny) , 2017 – 06 – 08 ,刘正宇 ,张军等 (Z. Y. Liu ,J. Zhang et al.)S-2201(holotype ,PE)。

小叶楼梯草组 Sect. *Weddellia* (H. Schröter) W. T. Wang

圆微叶楼梯草 图 2 :A ~ C

Elatostema gyronanophyllum W. T. Wang , sp. nov. Fig. 2 :A – C

(Ser. Parva W. T. Wang)

Species nova haec est arcte affinis *E. sinensi* H. Schröter , a quo foliis minoribus , eorum laminis usque ad 5 cm longis , earum nervis secundariis utrinque 2 – 3 , foliis redactis suborbicularibus , bracteis involucralibus pistillatis ca. 12 per capitulum triangularibus , flore pistillato tepalis duobus praedito , stigmate depresso-globoso differt. In *E. sinensi* , folia majora , eorum laminae usque ad 9.5 cm longae , earum nervi secundarii folii latere angustiore 4 et latere latiore 5 – 7 , bractee involucrales pistillatae numerosae per capitulum et lineares , flos pistillatus tepalis carens , stigma penicillatum , et folia redacta anguste elliptica sunt.

Perennial herb. Stems ca. 5 , 12 – 21 cm tall , above base 1.5 – 2 mm across , above densely hirtellous , simple. Normal leaves shortly petiolate or sessile ; blades papery , obliquely elliptic or oblong , (1 – 2 – 5 cm × (0.7 –) 1.1 – 1.8 cm , at apex acuminate , rarely acute , at base cuneate at leaf narrow side and rounded at broad side , at margin dentate , adaxially sparsely strigulose , abaxially on nerves puberulous , semi-triplinerved , secondary nerves at each leaf side 2 – 3 , cystoliths dense , inconspicuous , bacilliform , 0.15 – 0.5 mm long ; petioles 0.3 mm long ; stipules white , lineari-lanceolate , 1.5 – 3 mm long , glabrous. Reduced leaves opposite to normal leaves , orbitular or suborbicular , 2 – 4 mm in diam. , entire rarely 3-lobulate. Pistillate capitulum

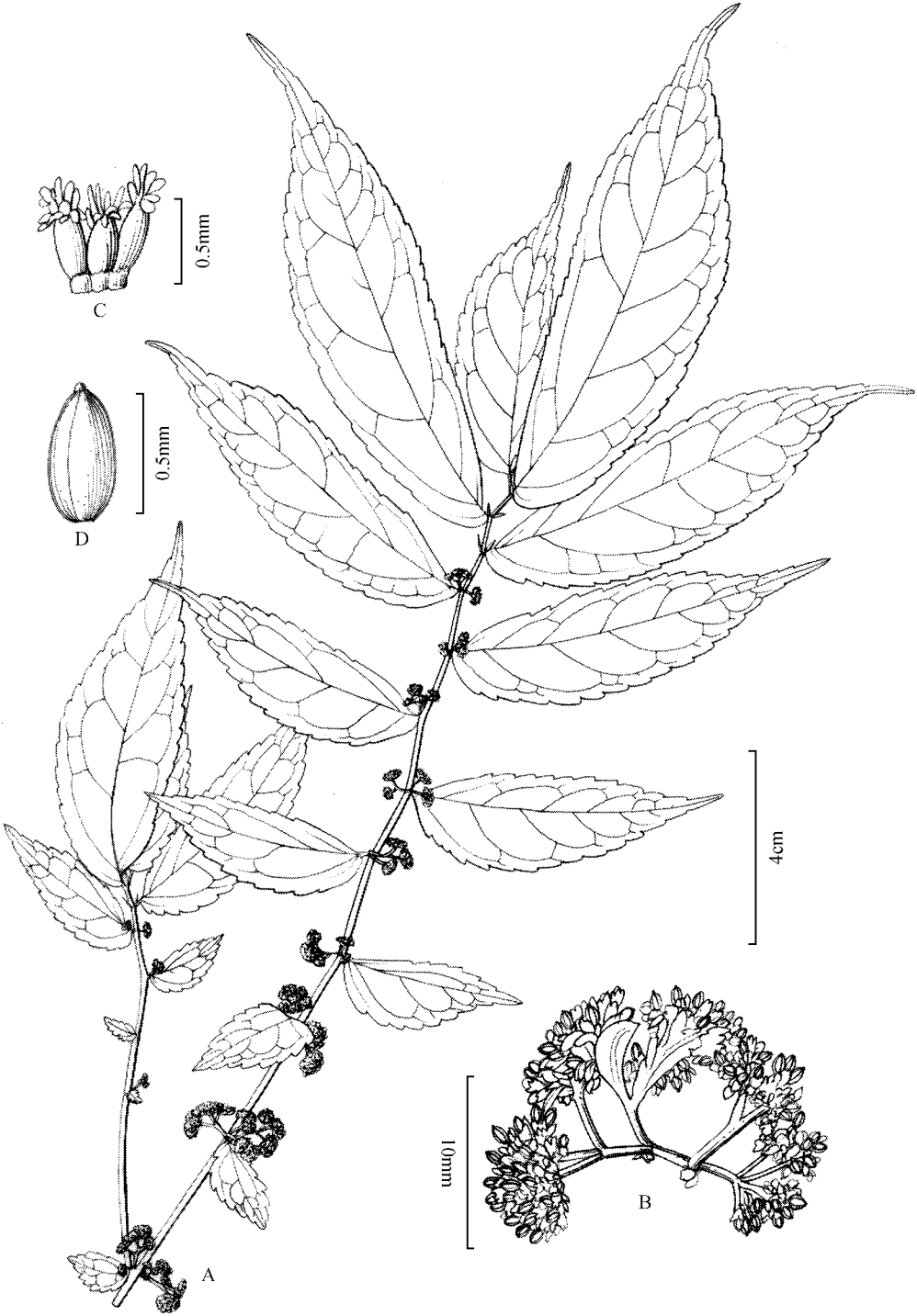


图 1 雌伞楼梯草 A. 开花雌茎上部 B. 雌聚伞花序 C. 3 朵雌花 D. 瘦果

Fig. 1 *Elatostema femineocymosum* A. Upper part of flowering pistillate stem ; B. Pistillate cyme ; C. Three pistillate flowers ; D. Achene(from holotype)

singly axillary , 2 – 5 mm in diam. , subsessile , many-flowered ; receptacle ca. 2 mm in diam. , with a few hairs ; involucral bracts ca. 12 , greenish , membranous , triangular or narrow-triangular , 1.4 mm × 1 – 2 mm , ciliate , apex corniculate , with green horn-

like projections 0.25 – 0.5 mm long ; bracteoles dense , white , ovate , 1 mm × 0.6 mm , above long ciliate. Pistillate flower : Tepals 2 , white , broadly ovate , 0.1 mm long , glabrous ; ovary ellipsoid , 0.45 mm long , glabrous ; stigma depressed-globose , ca.

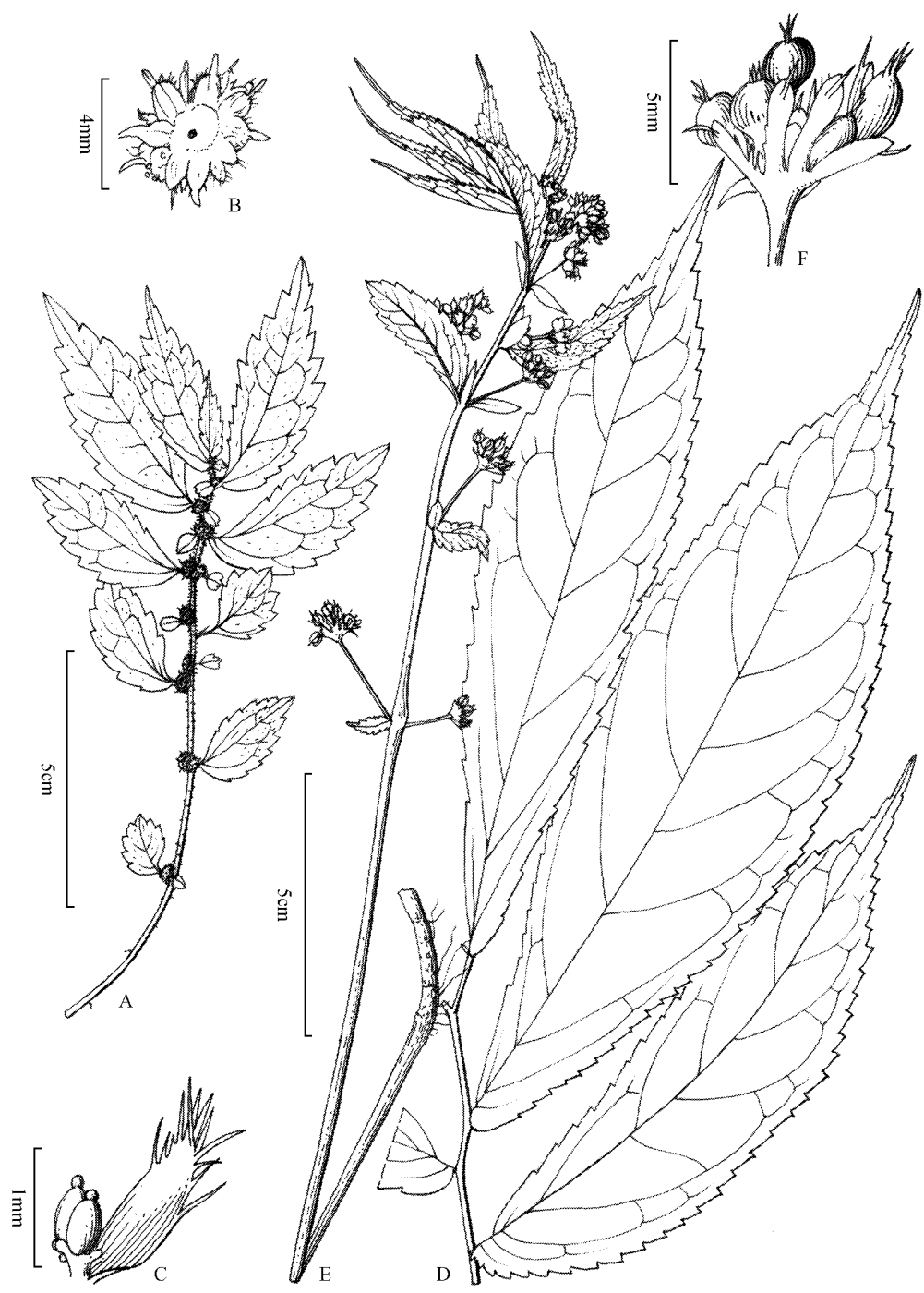


图 2 A~C. 圆微叶楼梯草 :A. 开花雌茎中部和上部 B. 雌头状花序(下面观) C. 雌小苞片和 2 朵雌花 D~F. 正宇楼梯草 :D. 营养茎上部 E. 开花雄茎 F. 雄头状花序

Fig. 2 A – C. *Elatostema gyronanophyllum* :A. Middle and upper parts of flowering pistillate stem ;B. Pistillate flowers(from holotype) D – F. *E. zhengyuanum* :D. Upper part of vegetative stem ;E. Flowering staminate stem ;F. Staminate capitulum(from holotype)

0.15 mm in diam.

重庆市(Chongqing Shi):江津市,四面山,大窝铺(Jiangjin Qu ,**Simian Shan** ,Dawopu), alt. 1 085 m 阔叶林(in broad-leaved forest),茎多汁,花腋生,黄绿色(stems juicy ,fls. axillary ,yellow-

green) 2017 – 05 – 16 ,刘正宇,张军等(Z. Y. Liu , J. Zhang et al.) S-1807(holotype ,PE).

本种在亲缘关系方面与对叶楼梯草 *E. sinense* H. Schröter 很相近,与后者的区别在于本种的叶较小,叶片长达 5 cm,每侧具 2~3 条二级脉,退化叶

圆形或近圆形,雌总苞具 12 枚三角形苞片,雌花具 2 花被片,柱头扁球形。在对叶楼梯草,叶较大,叶片长达 9.5 cm,其二级脉在叶狭侧 4 条,在宽侧 5~7 条,退化叶呈狭椭圆形。雌总苞具多数条形苞片,雌花无花被片,柱头画笔头状^[1]。

正字楼梯草 图 2 D~F

Elatostema zhengyuanum W. T. Wang, sp.

nov. Fig. 2 D~F

(Sect. *Sublinearia* W. T. Wang)

Species nova haec est arcte affinis *E. simianshanico* W. T. Wang, a quo caulibus glabris nonnullis vegetativis, foliis normalibus praeditis nonnullis floriferis foliis minoribus praeditis, foliorum normalium laminis majoribus lanceolatis 3~9 mm longis, bracteis involucribus staminatis oblanceolato-oblongis dorso haud carinatis recedit. In *E. simianshanico*, caules prope apicem puberuli, ei vegetativi nulli, foliorum laminae minores, usque ad 10 cm longae, cystolithi minores, 0.1~0.2 mm longi, stipulae etiam minores, subulatae, ca. 1.2 mm longae, et bractee involucriales staminatae lineari-naviculares dorso carinatae sunt.

Perennial herbs. Stems vegetative or bearing flowers. Vegetative stem ca. 60 cm tall, above base ca. 2 mm across, glabrous, below 1-branched, above 6-leaved. Leaves of vegetative stem alternate, shortly petiolate, glabrous; blades papery, oblanceolate or oblong, 9~17 cm × 2.4~4.6 cm, at apex long acuminate or subcuspidate, at base cuneate at leaf narrow side and auriculate at broad side, at margin densely dentibulate, penninerved, secondary nerves at leaf narrow side 5 and at broad side 6, flat, cystoliths dense, bacilliform, 0.3~0.8 mm long; petioles 0.8~2 mm long; stipules green, narrowly triangular, 3 mm long. Stem with staminate flowers ca. 35 cm tall, glabrous, with alternate small leaves lanceolate, 3~4 cm long and stipules white, lanceolate, 9 mm long, and on each leaf axil with a pair of staminate capitula. Staminate capitula 7~10 mm broad, ca. 6-flowered; peduncles 8~18 mm long, glabrous; receptacles small, 2~3 mm in diam., glabrous; involucrial bracts ca. 7, 1-seriate, white, membranous, oblanceolate-oblong, 2~3 mm × 1~1.5 mm, abaxially below apex long 1-corniculate, on

apex sparsely ciliate; bracteoles ca. 2, narrowly linear, ca. 3 mm long, glabrous; pedicels 1.8~2.5 mm long, glabrous. Staminate flower buds broadly ovoid, 2.2~2.5 mm in diam., subglabrous, on apex 5-corniculate, with horn-like projections 1.5~2 mm long. Pistillate capitula and pistillate flowers unknown.

重庆市(Chongqing Shi):江津区,四面山,自朝阳关至大黄沟途中(Jiangjin Qu Simian Shan on the way from Chaoyangguan to Dahuang valley) alt. 1026 m,阔叶林溪边,花白色带紫红色(by stream in broad-leaved forest, fls. white, tinged with purplish red) 2017-03-28,刘正宇,张军等(Z. Y. Liu, J. Zhang et al.) S-1204(**holotype**, PE).

本种在亲缘关系方面很接近四面山楼梯草 *E. simianshanicum* W. T. Wang,与后者的区别在于本种的茎无毛,有时为营养茎,具正常叶,有时具花,具较小叶,叶片(长达 17 cm)、钟乳体(长 0.3~0.8 cm)和托叶(披针形,长 3~9 mm)均较大,雄头状花序的总苞苞片倒披针状长圆形,背面无鸡冠状突起。在四面山楼梯草,茎近顶部被短柔毛,无营养茎,叶片(长达 10 cm)、钟乳体(长 0.1~0.2 mm)和托叶(钻形,长 1.2 mm)均较小,雄头状花序的总苞片条状船形,背面有 1 条鸡冠状突起^[2]。

本种以刘正宇先生的名字命名。刘正宇先生多年来在重庆市金佛山、四面山等多地采集到大量植物标本,为重庆市植物区系的研究做出重要贡献。

致谢 深切感谢刘正宇先生惠赠珍贵植物标本,以及孙英宝先生为本文绘图。

参 考 文 献

- 王文采. 中国楼梯草属植物[M]. 青岛:青岛出版社, 2014.
Wang W T. *Elatostema* (Urticaceae) in China[M]. Qingdao Qingdao Publishing House 2014.
- 王文采. 重庆赤车属一新种和楼梯草属二新种[J]. 植物研究 2017 37(5) 641~644.
Wang W T. One new species of *Pellionia* and two new species of *Elatostema* (Urticaceae) from Chongqing[J]. Bulletin of Botanical Research 2017 37(5) 641~644.
- Friis I. Urticaceae[M]. //Kubizki K, Rohrer J G, Bitrich V. The families and genera of vascular plants. Berlin: Springer-Verlag, 1993 2 612~630.